



Adding Value to the GAA Complex

Breisluach a Chur ar an Choimpléacs CLG

INFRASTRUCTURE GUIDANCE NOTES

ULSTER
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ATHLETICS TRACK

The GAA has a proud athletics tradition although it is one that has slipped well down its current list of priorities. For those thinking of re-invigorating athletics within the GAA through infrastructure development there's one big problem ... full-size athletics tracks and GAA pitches don't go together. At best a full-size athletics track providing a 400m circuit has available within it a rectangular area of 105m x 68m ... enough to accommodate a soccer pitch but well short of the GAA's minimum pitch requirements of 130m x 80m.

If full-size tracks are out, there's still potential to provide some athletics facilities. Some pointers that Clubs may find useful are:

- For reasonably formal athletics an area of some 130m x 10m is needed: this conveniently matches the minimum length of a GAA pitch.
- This will provide an eight-lane (each running lane should be 1.22m wide), 110m running track with a 5m circulation space at the 'starting end' and a 15m 'running off' space at the finishing end.
- For long-jumping and triple-jumping, a run-up of 40/45m (again 1.22m wide) is the competition standard provision.
- The landing pit should be at least 9.0m long and 2.75/3.0m wide with at least 30cm of sand in it.

If we're reasonably serious about our athletics provision then our track should be:

- Dimensionally accurate
- Soundly-constructed
- Finished with a surface that can withstand 8mm shoe spikes and that has an allowance for wear and weathering
- Durable; slip-resistant; and impact-resistant

A grass running track should meet all 'athletics requirements' of a GAA Club and can be constructed in the same way as a GAA pitch.

If a Club is taking athletics seriously, then an artificial surface might be considered. The construction of this type of track is similar to that of a 3G pitch and follows these stages:

1. Remove top-soil and excavate to a reasonable, firm load-bearing strata.
2. Install drains at this level drainage installation to sub-soil/sub-base.
3. Lay and compact 200mm of crushed, frost-resisting stone.
4. Blind the stone with a finer graded, crushed stone.
5. Lay and compact a second 200mm layer of crushed, frost-resisting stone.
6. Blind this layer (as with the first layer) with a finer graded, crushed stone.
7. Lay and compact a bitumen-bound base and wearing course.
8. Apply the final surface layer.

There are a variety of artificial track surfaces available but they tend to fall into two groups:

- a) Latex-bound rubber, built up in layers.
- b) Sprayed-on coats of polyurethane and synthetic rubber (the 'standard' red track).

Any Club thinking of going down this route should seek detailed professional advice.

Clubs thinking of developing some athletics related provision need to also give some thought to:

- Drainage: artificial (and other) surfaces can create a significant water run-off.
- Changing and shower provision for users.
- Access to/relationship with other indoor facilities (e.g. a sports hall).
- Floodlighting issues.

WALKWAY/JOGGING TRACK

Many GAA complexes now include walking/ jogging tracks which are put there for (largely) low-level physical activity by their members and others. When planning a new pitch Clubs should consider the feasibility of including a perimeter walkway round it. Although they rarely attract grant aid (even if the rest of the project is grant-aided) they are easily added in ... as long as the space is there.

Walkways and jogging tracks at GAA Clubs should not be designed as endurance tests but should be inclusive of people of all ages and abilities. They can however readily double-up with 'outdoor gyms', where pieces of high or low-tech fitness equipment are located periodically along the path.

Again, there are no hard-and-fast rules about walkways and jogging tracks but good practice tells us:

Path Surfaces

- Paths should be well lit with an even, firm, well-drained surface and be non-slip in both wet and dry weather
- Cracks, fissures and loose or soft material (such as loose gravel) should be avoided as they cause problems for people who are infirm on their feet and/or who use walking sticks; wheelchairs; and/or buggies.
- Paviours or setts/cobbles can cause similar problems.
- Design/layout should always reflect doors and gates that open outwards.
- The surface colour should contrast with its surroundings and should be 'non-glare'.
- 25mm kerbs can act as 'tapping rails' for cane users.

Widths and Gradients

- Paths should be at least 1.8m (and ideally 2m) wide (to accommodate two wheelchairs or buggies meeting).
- On well-used paths, passing places are particularly important: these can also be used to provide seating.
- The maximum British Standards gradient for paths and ramps is 1:12 but in practice this is too steep for many people, particularly older people and wheelchair users with limited upper body strength.
- Sustained gradients of more than 1:20 should be interrupted by level resting platforms (approximately 1.8m x 1.8m) at least every 30m.
- Where the gradient is above 1:20, handrails 1m above the ground should be provided.
- Path cambers (or sideways slopes) should be no more than 1:50 and ideally no more than 1:100.

Paths should have some basic lighting, usually low-level and for personal safety reasons avoid having hidden/secluded areas. Good signage, ideally including distance markers, should be included. Paths and walkways are good locations for information; interpretation; and notice-boards. They also need to be regularly maintained and refurbished.

Finally, it is preferable to separate out pedestrians' and cyclists' use of such tracks.

PLAY AREAS

GAA Clubs should be places for children. Whilst the core business is the delivery of enjoyable Gaelic games for children, many Clubs broaden out the ‘offer’ to children – and their parents/carers – by providing play areas.

As with most parts of GAA infrastructure development, there can be a lot more to this than meets the eye.

Many children’s play areas have been developed on what has become known as the ‘KFC basis’ ... ie ‘kit; fencing; and carpet’. This delivers a ready-made package ... but all too often it’s one that isn’t really attractive to great numbers of children. Typically play areas are targeted at 4-10 year-olds but a properly thought-out play area can also offer something to older children and teenagers. In a whole-family, inclusive GAA this is a very important concept.

The primary aim of designing a play space must be to offer children a rich play environment where they can have a wide variety of play experiences and, where possible, learn about the natural environment. Successful play areas therefore:

- Offer movement and physical activity with space and features that allow a range of energetic and strength-building play experiences.
- Stimulate the five senses, maybe providing access to music and sound, and different smells made by plants and leaves.
- Are good places for social interaction, allowing children to choose whether and when to play alone or with others, to negotiate, cooperate, compete and resolve conflicts.
- Allow children to manipulate natural and fabricated materials, use tools, and have access to bits and pieces of all kinds.
- Offer children challenge and activities that test the limits of their capabilities, including rough-and-tumble, climbing and informal sports and games.

These all complement the GAA ethos. Sector experience (well-articulated in Play England’s “Design for Play” publication) shows that:

SUCCESSFUL PLAY SPACES ...	SO GAA CLUB PLAY AREAS SHOULD...
Are bespoke	Be designed to enhance their setting and reflect the ‘spirit of the place’: that should be grist to the mill for any GAA Club ... a chance to emphasise the local and its heritage.
Are well-located	Sit where children would play naturally and are away from danger (including traffic), balancing pleasant seclusion with the need for supervision. It should relate to other Club facilities and activities: for example, a play area far removed from the pitch will split up family groups.
Make use of natural elements	Bring nature and life centre-stage and help deliver the GAA’s heritage agenda: the use of logs, boulders and planting will help achieve this.
Provide a wide range of play experiences.	Be non-prescriptive and encourage the interaction of parents ... quite often simply by including sheltered seating for them (though ideally at the core of the play area rather than on its edge)

Are accessible to both disabled and non-disabled children.	Be seen as an important part of the Club's inclusion and integration agendas.
Meet community needs and 'are loved by all'.	Be designed to work as a community hub and are a place where people of all ages just like being: that means going to look at other play-areas elsewhere and talking to the most important people involved here – children; parents; youth coaches; and local teachers.
Build in opportunities to experience risk and challenge.	Aim to accommodate GAA Clubs' age groups from Under 6s through to teenagers: good design will avoid segregation of children by either age or ability.
Build in opportunities to experience risk and challenge.	Provide more of exactly what Gaelic games are supposed to provide ... challenge; excitement; and enjoyment, where risk is minimised but never totally removed.
Are sustainable and appropriately-maintained.	Use recycled and sustainable materials (including natural ones) and minimise the use of energy and water: perfect tidiness is not always the sign of a 'good' play area.
Allow for change and evolution.	Build in 'slack space' at the design stage so that children can develop their own informal activities and additions can be made later.

Whatever the play area, equipment will be central to it. Some tips which Clubs might find useful here are:

- Locate equipment carefully as the right setting will enhance it considerably.
- Each piece of static or fixed equipment should be 2.5m apart from each other piece.
- When locating equipment, remember that children's 'desire lines' tend to run in straight lines ... so, for example, don't place swings in a 'desire line' between two fixed/ static pieces.
- Include some equipment which can be used flexibly and is 'non-prescriptive' in its use.
- Choose equipment which helps make the play space inclusive: hammock swings; 'accessible roundabouts'; and equipment which accommodates companion or helper, such as wide slides or big circulation platforms.
- Use a mix of manufacturers to create variety.
- Check there are no entrapment spaces within or between pieces of equipment.

There are arguments for-and-against fencing around playgrounds. Typically, it's put there to prevent vandalism or to provide safety or to keep dogs out. But equally it can look unnatural and give a 'Keep Out' rather than a 'Come In' message. Some useful pointers here are:

- Play area location and design and the ability of parents/carers to comfortably supervise it will determine if it's safe.
- The most effective play areas tend to have 'fuzzy' rather than fenced-in edges.
- If a fence is needed, the further back it is located from the play area core the less intrusive it will look ... though the more expensive it will become.
- Gates in fences should open outwards (to keep out animals) and be at least 1.1m wide.

- Hedging and changes in level can provide boundaries which are effective yet pleasing-to-the-eye.

Plants (whether for hedging or not) in and around a play area add value to it. Clubs should choose plants which are:

- Fast growing.
- Easy to maintain.
- Resilient.
- Native species (to reflect local heritage and to encourage wildlife).

Equally they should avoid plants which:

- Are uncomfortable to the touch, i.e. with thorns or leaves with sharp edges.
- Contain substances that could irritate the skin.
- Are poisonous.

The surface of the play area also needs some thought and whilst there's no one-size-fits-all solution, most play areas usually involve one or more of the following:

SURFACE	POSITIVES	NEGATIVES
Grass	<ul style="list-style-type: none"> • Very cheap • Vandal-resistant • Can help drainage • Environmentally-friendly 	<ul style="list-style-type: none"> • Vulnerable to wear • Needs regular maintenance
Bark or Wood Chips	<ul style="list-style-type: none"> • Absorbs impacts/falls • Vandal resistant • Good for drainage • Sustainable product 	<ul style="list-style-type: none"> • Needs topping up • Poor for wheelchairs • Needs membrane underneath • Needs edging
Sand	<ul style="list-style-type: none"> • Absorbs impacts/falls • Vandal resistant • Good for drainage • Can act as a play resource 	<ul style="list-style-type: none"> • Hardens in wet or frost • Prone to being carried away • Poor for wheelchairs • Needs membrane underneath • Needs edging
Grit	<ul style="list-style-type: none"> • As sand • Less likely to be carried away 	<ul style="list-style-type: none"> • As sand • Can sometimes form into a solid mass
Pea Gravel	<ul style="list-style-type: none"> • As grit 	<ul style="list-style-type: none"> • As grit • Can be thrown by children
Wet Pour	<ul style="list-style-type: none"> • Low maintenance • Longevity and resistance to wear • Can be used on mounds and slopes • Good for wheelchairs and buggies • Can add colour • Can be marked out for games 	<ul style="list-style-type: none"> • Very expensive • Can create water run-off • Can cause friction burns • Less absorbent for impacts/falls
Rubber tiles or mats	<ul style="list-style-type: none"> • Absorbs impacts/falls • Good for wheelchairs and buggies • Good for drainage • Can add colour • May be portable 	<ul style="list-style-type: none"> • Can be expensive

Many well-used, popular play areas include a variety of surfaces.

Finally, inter-generational work is central to the GAA. A children's play area complemented by an outdoor gym can help take this work forward.

Outdoor gyms are equipped with low impact, resistance-based equipment including exercise bikes, cross-trainers and stretch stations. They are typically designed to offer a workout for all the family from children to pensioners and can be colour-coded to indicate whether they are for toning, cardio or chill-out exercises. Outdoor gyms can also be very low-tech, for example using locally sourced timber to create basic exercise stations. Whatever their content, they should always include readable instructions re how to use equipment/features.

HANDBALL

A standard four-wall GAA handball court is 20 feet (6.1m) wide; 20 feet high (with the back wall at least 14 feet high); and 40 feet (12m) long.

Walls are usually a smooth-rendered block wall whilst floors tend to be a sprung hardwood. The walls should be painted white and the floor should be a non-slip sports surface. Access to the alley is through a door in the back wall – which may be made of glass to facilitate spectators. Top quality lighting is essential as is well-controlled heating and ventilation.

Dedicated handball alleys are expensive to build and tend to be useable for handball only and very little else. When considering building a handball alley, Clubs need to look at:

- The likely demand for and use of the facility.
- Whether a joint project with someone else/ somewhere else might be better.
- Whether a 'one wall' solution might be more appropriate.
- How the alley will relate to/link in with other Club facilities, especially changing and showers.

'One-wall' handball is an increasing feature of sports halls and even appropriate outdoor spaces. A wall area 20 feet wide by 15 feet high is required, with a floor area 20 feet wide and 34 feet long running away from it. A standard 'four court' sports hall could easily accommodate four 'one wall alleys'

HURLING WALLS

These are now seen as an important means of allowing hurlers of all ages and all levels improve their skills, almost regardless of the time of year or weather conditions. Previous generations of hurlers used gable ends; building walls; and handball alleys for this purpose so the hurling wall just builds on traditional good practice.

It is estimated that a dominant player in a match will be on the ball 15 times: a night's session using a hurling wall will allow him/ her to be on the ball up to 300 times. The benefits for handling; striking; and skills development are obvious.

The ideal hurling wall will:

- Be 40m long and 5m high, with a playing area of 40m running away from it: this will facilitate its use by a full panel of players.
- Be topped with a catch-net a further 2m high and angled back into the playing area.
- Have two 6m long 'wing walls' at either end of it, running at right angles from the main wall back in the direction of the playing area.

- Be made of seamless poured concrete or prefabricated concrete slabs (the surface of a rendered block wall will crack under sustained use and the mortar-joints in an uncovered block wall will cause the ball to behave inconsistently).
- Have a 3G playing surface 40m x 40m: grit is an alternative surface followed by tarmacadam and lastly, concrete (these latter two surfaces are dangerous in frost).
- Include floodlighting to at least 250/350lux the wall/playing area should be floodlit from the sides.
- Incorporate good drainage.
- Be appropriately linked into changing facilities.
- Take account of prevailing winds.
- Include some dug-out provision.

Some walls have goals and/or other targets painted onto them.

Hurling walls are essentially an outdoor facility but sports buildings can also accommodate hurling walls ... provided the space is available; the walls are fit-for purpose; and the floor surface is suitable.

SPECTATOR ACCOMODATION

The spectator and/or non-playing Club member is the life-blood of any Club but all too often their needs have been low on the list of GAA infrastructure priorities. However as with many other things, from being seen historically as a luxury, fit-for-purpose spectator accommodation is now seen as a necessary part of the GAA Club offer.

The most important fact for clubs to be aware of regarding spectators is the fundamentally obvious one: they come to watch the games. That basic fact should underpin all planning of spectator accommodation. Spectators should therefore be offered accommodation which:

- Offers good sightlines, ie a clear, unrestricted view of the whole playing area.
- Provides some measure of comfort; shelter; and/or cover.
- Is easily accessible.
- Relates meaningfully to the Club's other facilities (and especially to toilets).

A good rule-of-thumb is that spectators should be able to see all of the touchline closest to them ... so roof supports; scoreboards; dug-outs; walls; barriers; fencing; and (a common feature of most Club pitches) advertising hoardings should not get in the way.

The quality of sightlines is simply determined by the ability to see over the head of spectators in front. This is usually expressed as a 'C' value, which is the distance between the centre of the eye and the top of the head in front of the viewer. A 'C' value of 120mm gives a good sightline and one of 150mm an excellent one. New GAA stands should achieve a minimum 'C' value of 90mm for all seats.

Calculating 'C' values is a technical process that should be undertaken by professionals.

The 'C' value will determine the rake or slope of the stand and essentially the steeper the rake/slope, the better the sightlines. Health and safety now comes into play however: a seated row gradient should not exceed 34 degrees and a terrace or standing gradient should not go above 25 degrees.

Seated stands, even at Club level, should be what the GAA aspires to. Some basic pointers re seated accommodation are:

- Seats should be 500mm wide (minimum is 460mm) ... the same as we provide re 'bench space' for players in changing rooms and in dug-outs.
- A 'seating row depth' (ie the distance between the back of one row of seats to the back of the row in front of it ... or from the seated spectator's back to the front of his/her knees) of at least 760mm should be aimed for the maximum number.
- There should be 400mm of space available between the front edge of a tipped-up seat and the back of the seat in front of it.
- There should be no more than 14 seats in any row that has a gangway at one end of it only: if there are gangways at both ends the row can take 28 seats.
- Gangways should be 1.2m wide.
- The step risers in gangways should not be more than 190mm and should be uniform: the step goings should not be less than 280mm.
- No seat should be more than 30m from an exit.

Terracing remains a core feature of GAA grounds at all levels. Standing spectators should be offered the same quality of view as seated spectators. The 'C' value again applies but on terracing it is calculated for every second tread.

Terracing tread or steps should measure:

- 350-400mm from front to back
- 75-180mm in height

Current best practice says that terrace crush barriers should run uninterrupted from gangway to gangway. No standing spectator should be within 12m of a gangway ... which should be 1.2m wide and marked in conspicuous non-slip paint.

Viewing slopes are now discouraged but where they exist, they should be:

- Well-drained.
- Sound underfoot.
- At an angle of no more than 10 degrees.

The ability of people to move quickly and safely is central to spectator safety. This includes movement into the ground; movement within it; and movement back out again. Many Clubs now use turnstiles to control movement into their grounds: it's important to remember that one turnstile is reckoned to be able to process a maximum of 660 people an hour.